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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/761,244	01/22/2004	Hisamitsu Takagi	122.1578	2018
21171	7590	08/05/2004	EXAMINER	
STAAS & HALSEY LLP SUITE 700 1201 NEW YORK AVENUE, N.W. WASHINGTON, DC 20005			CHANG, YEAN HSI	
			ART UNIT	PAPER NUMBER
			2835	

DATE MAILED: 08/05/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

10/761,244

Applicant(s)

TAKAGI ET AL.

Examiner

Yean-Hsi Chang

Art Unit

2835

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 22 January 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-8 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-8 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 22 January 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
- 1) ☒ Certified copies of the priority documents have been received.
  - 2) ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - 3) ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>1/22/04</u> <u>4/22/04</u> | 6) <input type="checkbox"/> Other: _____  |

## **DETAILED ACTION**

### ***Specification***

1. The disclosure is objected to because of the following informalities: In the specification, same numbers, such as: 52, 54 and 70 have been used for different elements.

Appropriate correction is required.

### ***Claim Rejections - 35 USC § 102***

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. Claims 1-8 are rejected under 35 U.S.C. 102(e) as being anticipated by Takagi (US 6,754,507 B2).

Takagi teaches a portable apparatus (100, fig. 4A) comprising:

- a first housing (120, fig. 4B) having a printed board module (150, fig 4B), a second housing (130, fig. 4B) coupled at one end thereof with

the first housing via a hinge mechanism (103, fig. 4B) and having a printed board module (151, fig. 4B), a flexible flat cable (154, fig. 4B) connected at one end thereof with the printed board module in the first housing and at the other end thereof with the printed board module in the second housing (shown in fig. 7), while being at least once curled (154a, fig. 5) at a position corresponding to the hinge mechanism (see col. 11, lines 12-14), and an insert member (140, fig. 7) to be inserted into the curled portion of the flexible flat cable (shown in fig. 7), wherein a limiting mechanism (next to 140, fig. 7; not labeled) is provided for limiting the movement of the insert member, without fixing the insert member to either the first housing or the second housing (claim 1);

- wherein the hinge mechanism is provided at two positions (shown in fig. 7) apart from each other in the axial direction, and the curled portion and the insert member are provided in a space defined between the two hinge mechanisms (also shown in fig. 7) (claim 2);
- and
- wherein the limiting mechanism for limiting the movement of the insert member is a stopper (shown next to 140, fig. 7) for mainly inhibiting the inclination of the insert member, attached to either one of the first or second housing (at one corner portion of 120, fig. 7) (claim 3).

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4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over Takagi in view of Ibaraki et al. (US 5,681,176).

Takagi discloses the claimed invention except the flexible cable has two-layered circuit patterns.

Ibaraki teaches a flexible cable (107 and 108, fig. 17) disposed through a hinge portion (105 and 106, fig. 11) of an electronic device (fig. 1), having two layered circuit patterns (107, fig. 15 and 108, fig. 16).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the device of Takagi with the flexible cable taught by Ibaraki for handling more data and signals.

6. Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over Takagi in view of Toedter (US 5,394,297).

Takagi discloses the claimed invention except a protective sheet is provided on the outer circumference of the flexible flat cable, for protecting the flexible flat cable.

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Toedter teaches a protective sheet (140, fig. 1a) being provided on the outer circumference of a flexible flat cable (125, fig. 1a), for protecting the flexible flat cable from wearing due to frictional contact.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the device of Takagi with the protective sheet taught by Toedter for protecting the flexible flat cable from wearing due to frictional contact.

7. Claims 6 and 7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Takagi.

Takagi discloses the claimed invention except the insert member and the stopper being made of elastic material such as sponge.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the insert member and the stopper with sponge material, since it has been held to be within the general skill of a worker in the art to select a well known material on the basis of its suitability for the intended use for the purpose of preventing the flexible cable from wearing due to frictional contact. MPEP §2144.07.

8. Claim 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over Takagi in view of Kobayashi et al.(US 5,103,377).

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Takagi discloses the claimed invention except the insert member having a hole extending in the axial direction along the center line thereof, through which at least one cable passes.

Kobayashi teaches an insert member (56, fig. 6) having a hole (not labeled) extending in the axial direction along the center line thereof, through which at least one cable passes (shown in fig. 6).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the device of Takagi with the insert member taught by Kobayashi for allowing additional connections through the hinge.

### ***Correspondence***

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Yean-Hsi Chang whose telephone number is (571) 272-2038. The examiner can normally be reached on 07:30-16:00.

If attempts to reach the examiner by telephone are unsuccessful, the Art Unit phone number is (571) 272-2800, ext. 35. The fax phone number for the organization where this application or proceeding is assigned is (703) 305-3431 for regular communications and for After Final communications. There are RightFax numbers and provide the fax sender with an auto-reply fax verifying receipt by the USPTO: Before-Final (703-872-9318) and After-Final (703-872-9319).

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Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-8558.

Yean-Hsi Chang  
Patent Examiner  
Art Unit: 2835  
August 4, 2004

A handwritten signature in black ink, appearing to read 'Yean Hsi Chang', written in a cursive style.